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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/723,355

11/26/2003

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EXAMINER

DOUGLAS, JOHN CHRISTOPHER

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

04/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/723,355	Applicant(s) SLATER ET AL.	
	Examiner JOHN C. DOUGLAS	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Examiner acknowledges the response filed on 1/02/2008 containing remarks and amendments to the claims.

Response to Arguments

Applicant's arguments, see remarks, filed 1/02/2008, with respect to the 102(e) rejection have been fully considered and are persuasive. The 102(e) rejection of claims 1-9 has been withdrawn. Applicant asserts that the Sughrue reference cannot be used under 103(a) because the reference fits the 103(c) exemption, according to a 132 declaration. However, Examiner points out that no declaration has been received by the office. Therefore, the Sughrue reference stands until such declaration is furnished.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a

person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-9 are rejected under 35 U.S.C. 103(a) as obvious over Sughrue (US 6254766).
2. With respect to claim 1, Sughrue discloses a desulfurization of cracked gasolines and diesel fuels where the process comprises: (a) contacting the hydrocarbon stream with a composition comprising zinc oxide, silica, alumina and nickel in the reduced valence state, in an amount sufficient to effect the removal of sulfur in the hydrocarbon stream in a desulfurization zone under conditions that there is formed a desulfurized hydrocarbon stream and a sulfurized composition; (b) separating the desulfurized hydrocarbon stream from the sulfurized composition; (c) regenerating at least a portion of the separated sulfurized composition in a regeneration zone to remove at least portion of the sulfur contained on the composition; (d) reducing the desulfurized composition in an activation zone to provide a reduced valence nickel content; (e)

returning at least a portion of the desulfurized, reduced composition to the desulfurization zone (see Sughrue, column 1, lines 5-13 and claim 1).

3. With respect to claim 2, Sughrue discloses where the diesel is a light cycle oil (see Sughrue, column 3, lines 53-57).

4. With respect to claims 3-5 and 7, Sughrue discloses where the desulfurization step, the regeneration step, and the reduction step are all carried out at pressures between 15 and 1500 psia and temperatures between 100 and 1000 degrees F (see Sughrue, column 7, lines 29-40, column 8, line 66 – column 9, line 16 and lines 28-36).

5. With respect to claim 6, Sughrue discloses where air is employed in the regeneration step (see Sughrue, column 9, lines 6-12).

6. With respect to claims 8 and 9, Sughrue discloses where the separated sulfurized composition is stripped prior to the regeneration zone and prior to the activation zone (see Sughrue, claims 23 and 24).

Response to Arguments

Applicant argues that Sughrue does not disclose the combined simultaneous desulfurization of both cracked gasolines and diesel fuels, but instead discloses the desulfurization of cracked gasolines or diesel fuel. Examiner agrees with this assertion, however, such a combination would have been obvious. According to *In re Larson* 144 USPQ 347, 349 (CCPA 1965), "one piece construction...is merely an obvious engineering choice." (see MPEP 2144.04 V. B.). Therefore, according to the MPEP, mere integration is not a patentable limitation. In this case, the difference between the

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prior art and the invention is combining two desulfurization processes into one integrated simultaneous process. Thus, the distinction between the prior art and the claims at issue is an integration limitation, which is an obvious limitation.

/Glenn A Caldarola/

Acting SPE of Art Unit 1797